

Number of Tritiations at the National Tritium Labelling Facility (NTLF)

Environmental Sampling Project Task Force
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Philip G. Williams

National Tritium Labelling Facility (NTLF)
Physical Biosciences Division
E.O. Lawrence Berkeley National Laboratory

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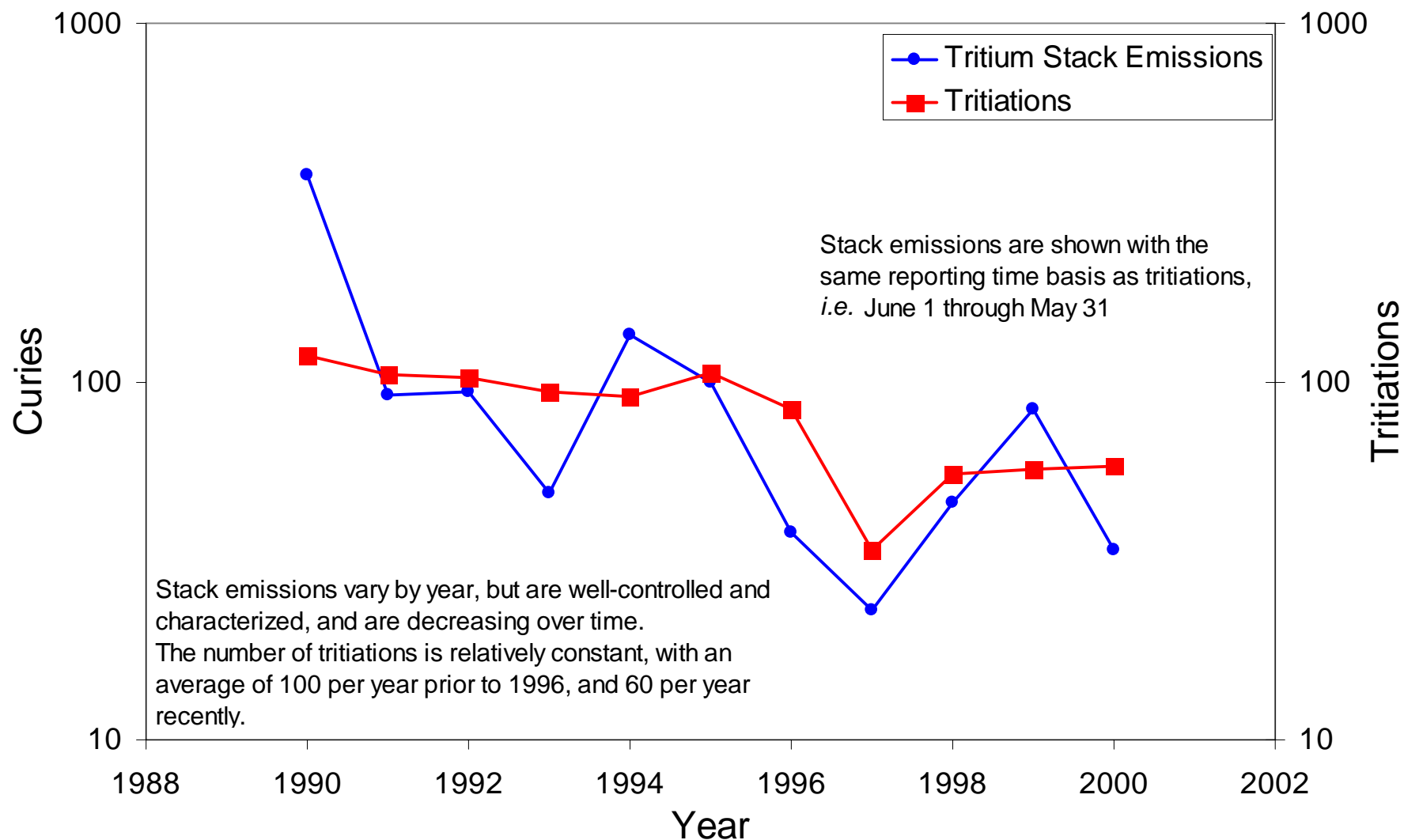
What Types of Activities Can Contribute to Tritium Emissions ?



- Tritium labelling reactions (scale, % tritium, chemistry ...)
- Recovery and isolation of products
- Characterization and purification of products
- Analysis of products
- Measurement of inventory
- Repair and maintenance of equipment
- Waste storage, packaging, and repackaging
- Waste characterization
- Mixed waste analysis, oxidation and recovery



Tritiations vs. Emissions



What Measures Have Contributed To Reduced Tritium Emissions ?



- Tritium recovery from reactions as tritium gas
- Prompt trapping, packaging and storage of waste
- Broader choice of labelling chemistry, better chemical tools
- Later stage labelling (smaller scale)
- More purification of product, no storage of crude products
- Improved tritiation line and emissions control hardware
- More and better process monitoring
- Review of safety peers (e.g. EH&S, TSAC)



Questions & Comments



Co-Principal Investigator and Facility Manager for the NTLF

Dr. Philip G. Williams
National Tritium Labelling Facility
Mail Stop 75-123
E.O. Lawrence Berkeley National Laboratory
One Cyclotron Road
Berkeley, CA 94720, U.S.A.

Adjunct Associate Professor
Department of Pharmaceutical Chemistry
School of Pharmacy
University of California
San Francisco, CA 94143-0446, U.S.A.

Voice: 510/486-7336
510/486-4373

Fax: 510/486-4877

E-Mail: PGWilliams@LBL.GOV

WWW: <http://www.lbl.gov/LBL-Programs/NTLF>

WWW: <http://www.lbl.gov/LBL-Programs/tritium>

